

THE GENUS *MACROCHELES* LATREILLE (ACARINA: MACROCHELIDAE) IN INDIA. A  
NEW SPECIES ASSOCIATED WITH DUNG BEETLE (COLEOPTERA: SCARABAEIDAE)  
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(With four text-figures)

A new species of *Macrocheles* (Latreille) namely *bucephali*, associated with *Heliocopris bucephalus* (F.) is described from Jabalpur, Madhya Pradesh.

INTRODUCTION

Through the courtesy of Dr. Y.N. Gupta, Central Regional Station, Zoological Survey of India, Jabalpur, a number of *Heliocopris bucephalus* (F.), all collected in Jabalpur, were received during an investigation on the systematics of macrochelid mites. Four females, lodged deep into the coxae, were recovered from one of the beetles. The material recovered proved to be females of a new species of the genus *Macrocheles* Latr. This is the first report of the genus from Madhya Pradesh.

Types have been deposited in the Zoological Survey of India, Calcutta. Measurements given in the text are in micrometres.

***Macrocheles bucephali* sp. nov.**

**FEMALE** (Figs. 1-4): Dorsal shield (Fig. 1) 727-780 long, 379-424 wide, granulated and bearing 28 pairs of setae. Setae  $j_1$  and  $j_4$  plumose distally, remainder simple and pointed.

Sternal shield as broad as long and ornamented with punctate *liniae*, *l.m.t.* distinct, other *liniae* as illustrated (Fig. 2); sternal setae simple and pointed. Genital shield truncated posteriorly and ornamented with punctures; genital setae simple and pointed. Ventrianal shield 227-242 long, 227-242 wide, ornamented with punctate lines; ventrianal setae simple.

Gnathosoma with six rows of deutosternal denticles. Tectum not discernible. Movable digit of

chelicera (Fig. 3) unidentate; fixed digit tridentate; cheliceral dorsal seta thickened and serrated; cheliceral brush more than half the length of movable digit.

Approximate lengths of legs (excluding pretarsi): I-400; II-333; III-303; IV-394. Tarsus I (60) longer than Tibia I (45). Tarsus II (Fig. 4) 90, Tibia II (75). Chaetotaxy of legs and palpi normal, genu of leg IV with six simple setae.

**MALE:** Unknown.

**Material examined:** Holotype: FEMALE, INDIA: Madhya Pradesh: Jabalpur, ex *Heliocopris bucephalus* (F.), 6. iv. 1985, Y.N. Gupta coll.; Paratypes: 3 females, same data as for holotype.

**Remarks:** *M. bucephali* sp. nov. seems to be related to *M. uroxys* Krantz. The ornamentation of the sternal shield (disposition of *l.m.t.* and *l. arc.*) in both the species is similar. But the former can be easily separated from the latter in the nature of dorsal chaetotaxy. Dorsal setae simple in *bucephali* except  $j_1$  and  $j_4$  with distal plumosity, while most of the dorsal setae are plumose in *uroxys*. Interestingly *uroxys* is also a phoretic member of *Macrocheles* described by Krantz (1983) found on sloth (*Bradypus tridactylus* L.) associated scarab beetles (*Uroxys besti* Ratcliffe) from Brazil. According to Ratcliffe (1980), sloth (arboreal edentates) - associated scarabs utilise the sloth for shelter and dispersal, and feeding on sloth dung.

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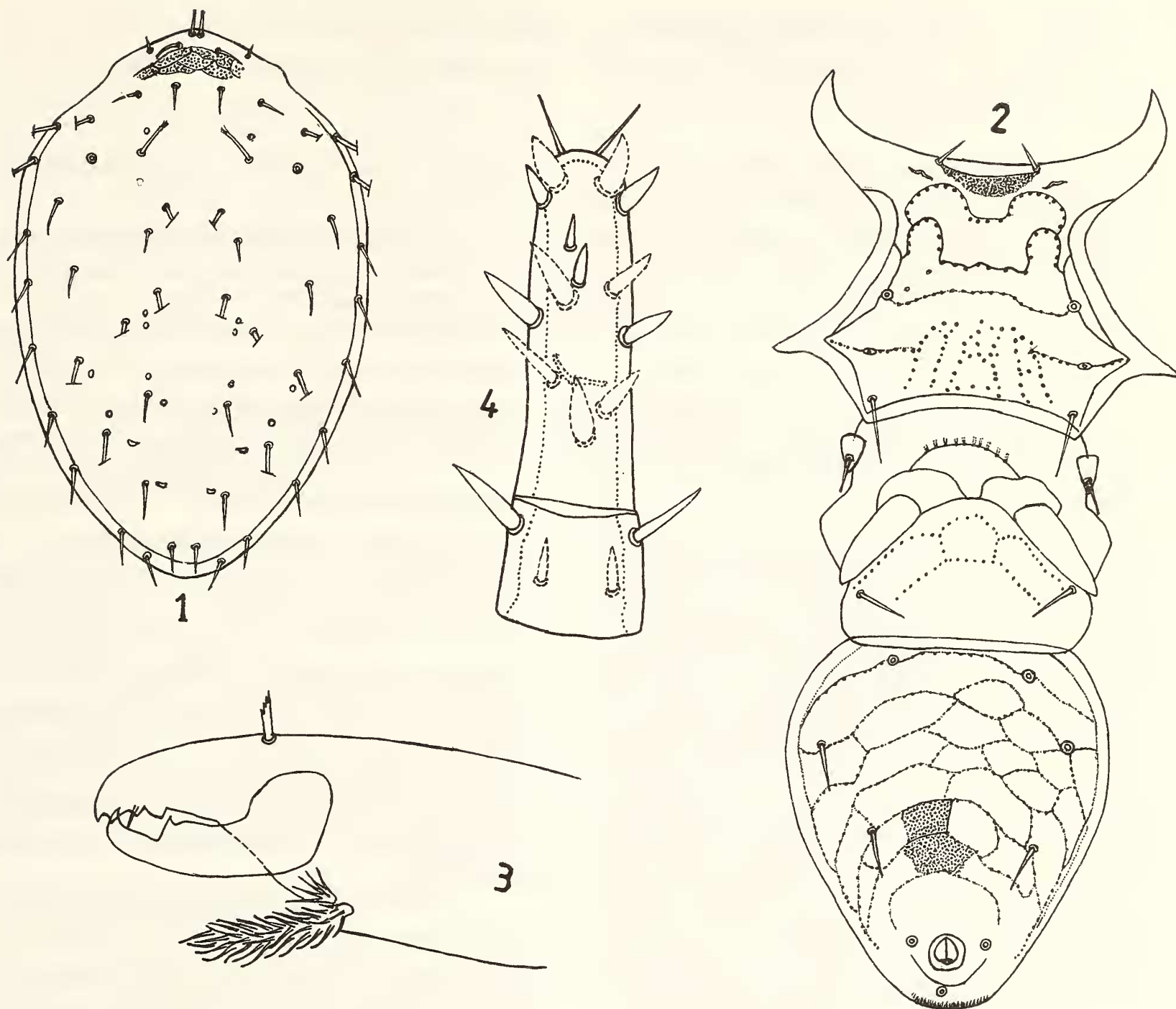


Fig. 1-4. Dorsal shield; 2. Venter; 3. Chelicera; 4. Tarsus II

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\* not seen in original.